

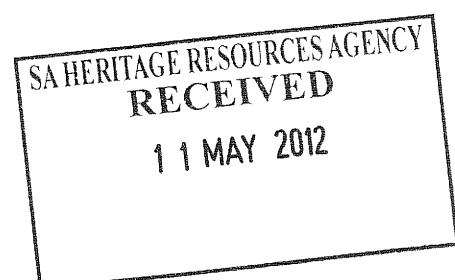
**PROPOSED KANANA PARK EXTENSION 6 TOWNSHIP,
GAUTENG PROVINCE: ARCHAEOLOGICAL AND HERITAGE
IMPACT ASSESSESSMENT REPORT.**

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Prepared For: KALA-HARI SURVEY AND PROJECTS

Final A/HIA Report

March 2012



4.1. Document information

TITLE:		PROPOSED KANANA PARK EXTENSION 6 TOWNSHIP, GAUTENG PROVINCE: ARCHAEOLOGICAL AND HERITAGE IMPACT ASSESSEMENT REPORT.	
PURPOSE OF SCOPE:			
The purpose of this document is to describe the cultural values and heritage factors that may be impacted on by the proposed installation of the proposed Kanana Park Extension 6 Township development. The proposed Kanana Park Extension 6 Township development is located in Gauteng Province.			
DOCUMENT VERIFICATION			
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ENDOSED			
Client Project Responsible Officer to sign off.			
Signature		Position	
Name:		Date:	

4.2. Nzumbululo RACIE Terms

R	Responsible: the person actually produces the document
A	Accountable: the person who has to answer for quality assurances
C	Consulted: those who are consulted before the document is finalised

4.4. AUTHOR IDENTIFICATION

Dr. M. Murimbika (Principal Archaeologist & Heritage Consultant) & N. Tomose conducted the HIA study and prepared this Report.

4.5. ACKNOWLEDGEMENTS

The author acknowledges Kala-Hari Survey Solutions for their assistance with information, and the associated project BID as well as responding to technical queries related to the project.

I	Informed: those who must be informed when the document is published
E	Endorsed: those who must approve the final document before it is published by the client

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4.3. Caveat

PROPOSED KANANA PARK EXTENSION 6 TOWNSHIP, GAUTENG PROVINCE: ARCHAEOLOGICAL AND HERITAGE IMPACT ASSESSMENT REPORT

Authorship: This Report has been prepared by Dr. M. Murimbika (Principal Investigator & Professional Archaeologist) assisted by Mr. N Tomose. The report is for the review of the Heritage Resources Agency (PHRA).

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Geographic Co-ordinate Information: Geographic co-ordinates in this report were obtained using a hand-held Garmin Global Positioning System device. The manufacturer states that these devices are accurate to within +/- 5 m.

Maps: Maps included in this report use data extracted from the NTS Map and Google Earth Pro.

Disclaimer: The Author is not responsible for omissions and inconsistencies that may result from information not available at the time this report was prepared.

The Archaeological and Heritage Impact Assessment Study was carried out within the context of tangible and intangible cultural heritage resources as defined by the SAHRA Regulations and Guidelines as to the authorisation proposed Township establishment Project being proposed by the city of Johannesburg.

Signed by Principle Investigator:



McEdward Murimbika (Ph.D.),

March 2012

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4.6. EXECUTIVE SUMMARY

Nzumbululo Holdings (Pty) Ltd has been commissioned by Kala-Hari Survey Solutions to conduct an Archaeological and Heritage Impact Assessment (AIA/HIA) Study for the proposed Kanana Park Extension 6 Township development. The proposed Kanana Park Extension 6 Township site is situated within the Johannesburg Metropolitan area of Gauteng Province. This report includes an impact study on potential archaeological and cultural heritage resources that may be associated with the proposed development project area. The findings of this report have been informed by desktop data review, field survey and impact assessment reporting which include recommendations to guide heritage authorities in making decisions with regards to the proposed project. This study was conducted as part of the specialist input for the Environmental Impact Assessment exercise.

Analysis of the archaeological, cultural heritage, environmental and historic context of the study area predicted that archaeological sites, cultural heritage sites, burial grounds or isolated artefacts were likely to be present on the affected landscape. The field survey was conducted to test this hypothesis and verify this prediction within the proposed Kanana Park Extension 6 Township area. The proposed site of interest is located in south of Johannesburg. The residential areas in the area include Orange Farm and Kanana Park. The level of disturbance in most of these areas is such that it is unlikely that large significant archaeological or physical heritage sites remain in tact *in situ* over most of the affected land portions.

The report makes the following observations:

- The project area by its geographic nature is generally accessible. Kanana Park Extension 6 Township site is situated on generally accessible sites on previously disturbed land parcels. However, some portions of the proposed Kanana Park Extension 6 Township site of interest were not accessible because of thick vegetation cover.
- The study identified historic homestead remains on different portions of the Kanana Park Extension 6 Township site of interest. However, none of the heritage sites are likely to be directly affected by the proposed Kanana Park Extension 6 Township development. This is especially clear from the observation that most of the proposed Kanana Park Extension 6 Township site is severely degraded from existing developments such as informal settlements and access roads.
- Although the possibility of archaeological or historical sites associated with the general project area is valid from a contextual studies perspective, no medium to high significance archaeological, heritage landmark or monument were recorded during this study.

The Report makes the following recommendations:

- The proposed Kanana Park Extension 6 Township site is situated within a contemporary degraded cultural landscape with existing densely built up settlements and associated infrastructures. The Kanana Park Extension 6 Township construction works will have minor disturbance within the earmarked Kanana Park Extension 6 Township servitude.
- The study did not identify any archaeological or heritage resources barrier to the proposed Kanana Park Extension 6 Township development.
- The proposed Kanana Park Extension 6 Township development may be approved by PHRA-G to proceed as planned subject to:

- A professional Archaeologist being retained to conducted a detailed archaeological walkdown exercise over the Kanana Park Extension 6 Township site specifically examining the final positions of the proposed street and reticulation servitudes.
- The walk down exercise should also survey approved construction work camp sites, access road and equipment storage sites.
- A heritage monitoring measures being incorporated into the project construction EMP.
- Should construction work commence for this project:
 - The Kanana Park Extension 6 Township construction teams should be inducted on the significance of the possible archaeological resources that may be encountered during subsurface construction work before they work on the area in order to ensure appropriate treatment and course of action is afforded to any chance finds.
 - If archaeological materials are uncovered, work should cease immediately and the SAHRA be notified and activity should not resume until appropriate management provisions are in place.
- The findings of this report, with approval of the SAHRA, may be classified as accessible to any interested and affected parties within the limits of the laws.

4.7. ABBREVIATIONS

AIA	Archaeological Impact Assessment
C	Contractor
CECO	Construction Environmental Conservation Officer
EAP	Environmental Assessment Practitioner
ECO	Environmental Conservation Officer
EIA	Environmental Impact Assessment
EM	Environmental Manager
EMP	Environmental Management Plan
HIA	Heritage Impact Assessment
LIA	Late Iron Age
NHRA	Nation Heritage Resources Act, Act 25 of 1999
PM	Project Manager
SM	Site Manager
SAHRA	South African Heritage Resources Agency

4.8. Definitions

The following terms used in this A/HIA are defined in the National Heritage Resources Act [NHRA], Act Nr. 25 of 1999, South African Heritage Resources Agency [SAHRA] Policies as well as the Australia ICOMOS Charter (Burra Charter):

Archaeological Material remains resulting from human activities, which are in a state of disuse and are in, or on, land and which are older than 100 years, including artefacts, human and hominid remains, and artificial features and structures.

Chance Finds Archaeological artefacts, features, structures or historical cultural remains such as human burials that are found accidentally in context previously not identified during cultural heritage scoping, screening and assessment studies. Such finds are usually found during earth moving activities such as water pipeline trench excavations.

Cultural Heritage Resources Same as Heritage Resources as defined and used in the National Heritage Resources Act (Act No. 25 of 1999). Refer to physical cultural properties such as archaeological and palaeontological sites; historic and prehistoric places, buildings, structures and material remains; cultural sites such as places of ritual or religious importance and their associated materials; burial sites or *graves* and their associated materials; geological or natural features of cultural importance or scientific significance. Cultural Heritage Resources also include intangible resources such as religion practices, ritual ceremonies, oral histories, memories and indigenous knowledge.

Cultural Significance The complexities of what makes a place, materials or intangible resources of value to society or part of, customarily assessed in terms of aesthetic, historical, scientific/research and social values.

Grave A place of interment (variably referred to as burial), including the contents, headstone or other marker of such a place, and any other structure on or associated with such place. A grave may occur in isolation or in association with others where upon it is referred to as being situated in a cemetery.

Historic Material remains resulting from human activities, which are younger than 100 years, but no longer in use, including artefacts, human remains and artificial features and structures.

In Situ material *Material culture* and surrounding deposits in their original location and context, for example an archaeological site that has not been disturbed by farming.

Late Iron Age this period is associated with the development of complex societies and state systems in southern Africa.

Material culture Buildings, structure, features, tools and other artefacts that constitute the remains from past societies.

Site A distinct spatial cluster of artefacts, structures, organic and environmental remains, as residues of past human activity

Place means site, area, land, landscape, building or other work, group of buildings or other works, and may include components, contents, spaces and views.

Cultural significance means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.

Fabric means all the physical material of the place including components, fixtures, contents and objects.

Conservation means all the processes of looking after a place so as to retain its cultural significance.

Use means the functions of a place, as well as the activities and practices that may occur at the place.

Compatible use means a use which respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance.

Setting means the area around a place, which may include the visual catchment.

Interpretation means all the ways of presenting the cultural significance of a place.

1. INTRODUCTION

4.9. Background

This Archaeological and Heritage Impact Assessment (A/HIA) Report has been prepared for the site for the proposed Kanana Park Extension 6 Township development in Gauteng Province. Kala-Hari Survey Solutions commissioned the study. This report details the field study, results of the study as well as discussion on the anticipated impacts of the proposed development. It focuses on identifying and assessing potential impacts on archaeological resources as well as on other physical cultural properties including historical heritage resources in relation to the proposed Kanana Park Extension 6 Township development. The study was designed to ensure that any significant archaeological or cultural physical property or sites are located and recorded, and site significance is evaluated to assess the nature and extent of expected impacts from the Kanana Park Extension 6 Township and associated infrastructure development. The assessment includes recommendations to manage the expected impact of the Kanana Park Extension 6 Township development site. The report includes recommendations to guide heritage authorities in making appropriate decision with regards to approval process for the proposed development. The report concludes with detailed recommendations on heritage management associated with the Kanana Park Extension 6 Township development work.

In line with SAHRA guidelines, this report, not necessarily in that order, provides:

- 1) Management summary
- 2) Methodology
- 3) Information with reference to the desktop study
- 4) Map and relevant geodetic images and data
- 5) GPS co-ordinates
- 6) Directions to the site
- 7) Site description and interpretation of the cultural area where the project will take place
- 8) Management details, description of affected cultural environment, photographic records of the project area
- 9) Recommendations regarding the significance of the site and recommendations regarding further monitoring of the site
- 10) Conclusion.

4.10. Location of Activity Area

The proposed township development is in Kanana Extension 6 residential area (Fig. 2 and 3). The Kanana Park Extension 6 Township site covers an area 500 square metres with a capacity of more than 600 residential stands (Kala-Hari Survey Solutions BID, 2011).

As such this project will cater for some of the residential requirements of the Johannesburg Metropolitan Municipality. (Please refer to Fig. 2 and 3). The urban areas consist of Kanana, Orange Farm and Soweto. (Kala-Hari Survey Solutions, 2011: BID).

The project area is accessed from the N1 South Highway. (Refer to Fig. 1 – Google Site Map).

Figure 1: Site and directions to access to the proposed Kanana Park Extension 6 Township servitude site.



4.11. Activity Description

- Establishment of Kanana Extension 6 residential area on the farm Cyferfontein 333 I Q. (Refer to Figures 1 and 2).
- Establishment of Kanana Park Extension 6 Township.

1. STATUTORY REQUIREMENTS

The statutory mandate of heritage impact assessment studies is to encourage and facilitate the protection and conservation of archaeological and cultural heritage sites, in accordance with the provisions of the National Heritage Resources Act, Act 25 of 1999 and auxiliary regulations. Therefore, in pre-development context, heritage impact assessment study is conducted to fulfil the requirements of Section 38 (1) of the National Heritage Resources Act (No 25 of 1999). The legislations requires that when constructing a linear development exceeding 300m in length or

developing an area exceeding 5000 m² in extent, the developer must notify the responsible heritage authority of the proposed development and they in turn must indicate within 14 days whether an impact assessment is required. The NHR Act notes that “any comments and recommendations of the relevant heritage resources authority with regard to such development have been taken into account prior to the granting of the consent”, the heritage authority here being Provincial Authority (PHRA-G).

Both the national legislations and provincial provisions provide protection for the following categories of heritage resources:

Landscapes, cultural or natural;

- Buildings or structures older than 60 years;
- Archaeological Sites, palaeontological material and meteorites;
- Burial grounds and graves;
- Public monuments and memorials;
- Living heritage (defined as including cultural tradition, oral history, performance, ritual, popular memory, skills and techniques, indigenous knowledge systems and the holistic approach to nature, society and social relationships) (Also see Appendix 4).

2. STUDY TERMS OF REFERENCE

The author was asked to conduct an AIA/HIA study addressing the following issues:

- Archaeological and heritage potential of each of the alternative Kanana Park Extension 6 Township site including any known data on sites in the affected areas;
- Provide details on methods of study; potential and recommendations to guide the PHRA-G provincial authority to make an informed with regards to authorisation of the proposed development.

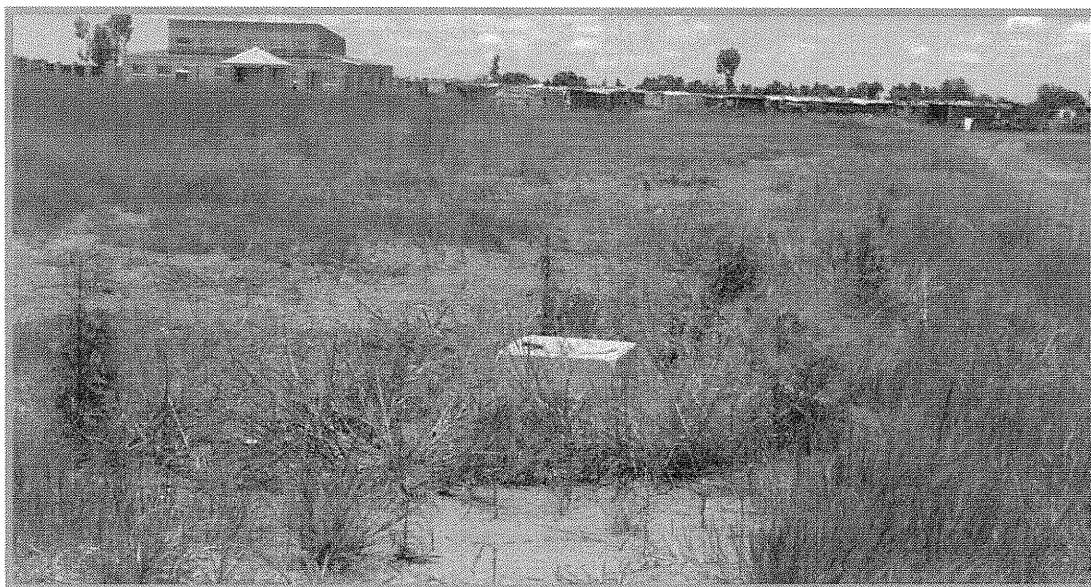


Plate 1: View of proposed Kanana Park Extension 6 Township site and built up section in the vicinity. (Photograph © by Author 2012).

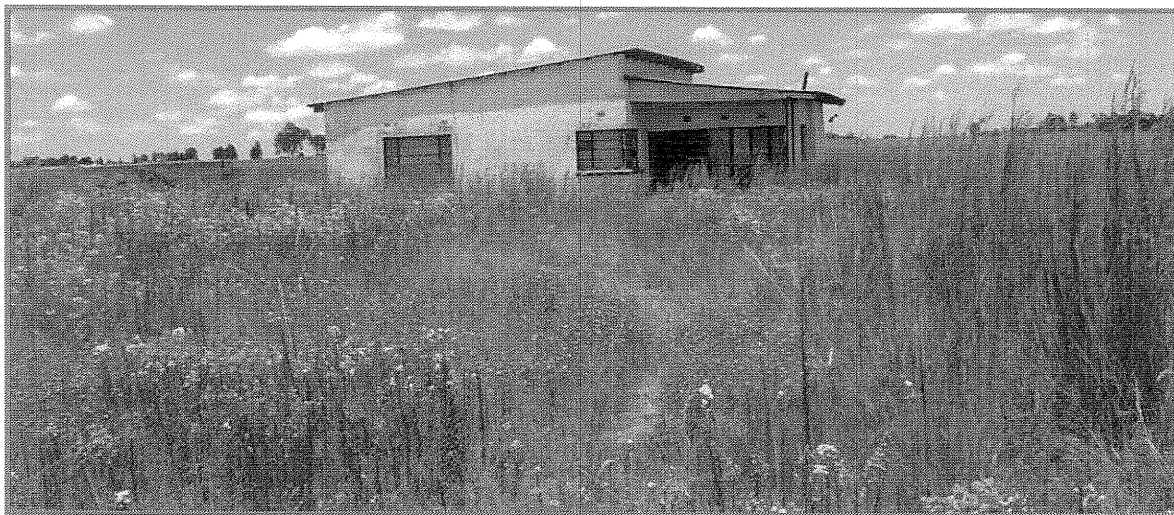


Plate 2: An abandoned house near the Site of Interest (Photograph © by Author 2012).



Plate 3: Typical cultural landscape within the project area ((Photograph © by Author 2012).

3. METHODOLOGY

The proposed Kanana Park Extension 6 Township development requires clearance and authorisation from government compliance agencies including the heritage authority of SAHRA. Key A/HIA objectives for this project are to:

Fulfil the statutory requirements of the National Heritage Resources Act, Act 25 of 1999.

- To identify and describe, (in terms of their conservation and / or preservation importance) sites of cultural and archaeological importance that may be affected by the proposed Kanana Park Extension 6 Township project. This study should include where appropriate, identify sites and features of traditional historical, social, scientific, cultural and aesthetic significance within the affected study area; the identification of gravesites.
- Assess the significance of the resources where they are identified.

- Evaluate the impact thereon with respect to the socio-economic opportunities and benefits that would be derived from the proposed development.
- Provide guidelines for protection and management of identified heritage sites and places (including associated intangible heritage resources management that may apply).
- Consult with the affected and other interested parties, where applicable, in regard to the impact on the heritage resources in the project's receiving environment.
- Make recommendations on mitigation measures with the view to reduce specific adverse impacts and enhance specific positive impacts on the heritage resources.
- Take responsibility for communicating with the SAHRA and other authorities in order to obtain the relevant permits and authorization with reference to heritage aspects.

In order to meet the objectives of the A/HIA Phase 1 study, the following tasks were conducted: 1) site file search, 2) limited literature review, 3) consultations with the affected family, 4) completion of a field survey and assessment and 5) analysis of the acquired data and report production. The following tasks were undertaken:

- Preparation of a predictive model for archaeological heritage resources in the study area.
- A review and gap analysis of archaeological, historical and cultural background information, including possible previous heritage consultant reports specific to the affected project area, the context of the study area and previous land use history as well as a site search;
- Field survey of sampled sections of the Kanana Park Extension 6 Township site within the study area, in order to test the predictive model regarding that heritage sites in the area;
- Physical cultural property recording of any identified sites or cultural heritage places;
- Identification of heritage significance; and
- Preparation of A/HIA report with recommendation, planning constraints and opportunities associated with the proposed development.

Large settlements, cornfields fields, grazing lands, vegetated river valleys; access and main road infrastructures, existing transmission and distribution Kanana Park Extension 6 Townships and other auxiliary infrastructures dominate the affected project area. This made detailed surficial inspection of the stretch of the proposed Kanana Park Extension 6 Township site very limited. As such, the survey covered judiciously systematic stratified sampled areas across the affected landscape. However, the entire project area was accessible through a network of district roads and village tracks used to access the settlements. Although limited sections of ground surface were covered with grass and thick bushes, this did not impede surficial feature identification of possible archaeological sites in sampled areas particularly those earmarked for the residential development (Plates 1 to 11).

Geographic coordinates were obtained with a handheld Garmin GPS global positioning unit. Photographs were taken as part of the documentation process during field study.

4.12. Assumptions And Limitations

No existing archaeological or heritage inventory records were accessed for this particular project area. Furthermore, the author does have previous A/HIA study records for the general project area. A limited literature review was completed to provide the general archaeological and historical context to determine the sensitivity of the cultural landscape. Literature does highlight that the inland Gauteng northeast cultural landscape has a significant density of archaeological and historical sites (also Whitelaw 1993; 1994; 1997; Hammond-Tooke, 1993; Huffman, 2007).

The field survey did not include any form of subsurface inspection beyond the inspection of burrows, road cut sections, and the sections exposed by erosion or field ploughing. Some assumptions were made as part of the study and therefore some limitations, uncertainties and gaps in information would apply. It should however, be noted that these do not invalidate the findings of this study in any significant way:

- The proposed Kanana Park Extension 6 Township infrastructure development will be limited to specific right of way sites and corridors as detailed in the development layout (Figure 2 & 3).
- The construction team to provide link and access to the Kanana Park Extension 6 Township development sites and service sites will use the existing access roads and there will be no without any major deviations.
- Given the heavily degraded nature on most affected project area and the level of high existing developments within the affected landscape, most sections of the project area have low potential to yield significant *in situ* archaeological or physical cultural properties.
- No excavations or sampling were undertaken, since a permit from heritage authorities is required to disturb a heritage resource. As such the results herein discussed are based on superficially observed indicators. However, these surface observations concentrated on exposed sections such as road cuts and clear farmland.
- No palaeontological survey was conducted.
- This study did not include any ethnographic and oral historical studies nor did it investigate the settlement history of the area.

4.13. Consultation

No community consultation was conducted during this phase of the A/HIA study. However, the EIA Public Participation Process invited comments from affected municipalities on any matter related to the proposed development.

5. CULTURE HISTORY BACKGROUND OF THE PROJECT AREA

The project area fall under Region G which forms the southernmost component of the City of Johannesburg's area of jurisdiction. It is geographically displaced from the greater Johannesburg. The larger component of the region was previously used as a reception area or a dormitory residential area. It consists of displaced and marginalized areas with high levels of poverty, unemployment, and a high number of informal settlements and large portions of vacant land with agricultural potential. The Region developed for two main reasons. Firstly due to the apartheid legislation that created an Indian residential area in the northern part of the region, known as Lenasia and secondly was the influx of large numbers of people seeking work, resulting in the spontaneous development of informal settlements, especially in the South. As a result, Region G has two fairly distinct areas and is divided for developmental purposes into the Greater Ennerdale, Lenasia, Eldorado Park and Protea areas in the North, and the Orange Farm, Stretford, Driezik and Weilers Farm (Kanana Park) area in the south. The Southern area of the region still contains agricultural land, which opens up possibilities for future development. At present, however, open spaces are often used for illegal dumping purpose. In addition, land and water pollution must be dealt with to ensure a clean, healthy living environment in the future. The area is characterized by many prominent natural features, including ridges, dams, tributaries and open spaces - large tracts of grassveld are found on the outskirts of settlements and even within formal neighbourhoods.

In an urban landscape characterized by sprawl, open space must be claimed for conservation and recreational purposes. The creation of safe, accessible parks is a priority. A significant amount of underdeveloped and vacant agricultural land is publicly owned, providing an opportunity for more intensive agricultural development.

The promotion of the agricultural sector and the management of development to ensure environmental sustainability are among the City council's stated goals. Region G is isolated from the economic development of the City, which has resulted in its marginalization and economic suppression. Extra-ordinary measures are needed to overcome the lack of economies of scale and attract investment of a sustainable nature, especially in greater Orange Farm. However, recently there has been some investment in the Northern parts of the region e.g. development of the Trade Route Mall. The area has some of the oldest informal settlements in Johannesburg, with very high densities, limited and very poor services such as pit latrines, boreholes and gravel roads. The City of

Johannesburg has identified Region G as one of the priority areas that needs urgent interventions and has started to implement capital projects to improve the livelihoods of the community and address service delivery backlogs. As such the proposed housing development is part of the long-term solutions to the perennial housing problems in the region.

Although Region G has sites of historic and archaeological significance, such as Gatsrand and Klipriver that need to be conserved together with the already established Olifantsfontein Nature Reserve none of them are on the direct path of the proposed development project. In general though, much improvement is still needed the bulk of the housing in these formal settlements still falls in the lower income bracket. And the large informal settlements, especially in the South, suffer from extreme poverty and unemployment, and their geographic isolation makes it costly to provide much needed infrastructure. Other priorities include the support of local economic development opportunities; management of informal settlements; protection of existing residential investments; promotion and management of mixed-use developments and promotion of regional connectivity. (<http://www.joburg.org.za/index> accessed 22 March 2012).

5.1. ARCHAEOLOGICAL BACKGROUND.

The Gauteng region trace the fabric of the country's heritage from all the way back to the dawn of humankind, sites such as the Cradle of Humankind World Heritage site signify the depth of the history represented in the Gauteng Province. The Johannesburg area, like most of Gauteng region has a culture history that also goes back to Stone Age periods (also see Deacon and Deacon, 1997). The San hunter-gather people have lived in the mountain, hills and hunted gathered from the valley lands of the modern day Gauteng for centuries long before the Bantu-speaking farmers arrived in southern Africa round about 400AD. The San hunter-gatherer left behind a large amount of archaeological evidence including hunting camps marked with stone tools and rock art (usually on rock shelter and cave walls and as well as cliff faces that today are some of the most unique prehistoric paintings on the continent) (Deacon and Deacon 1999).

In general the oldest evidence of early inhabitants of the Gauteng Province comprise of large stone tools called hand axes and cleavers found amongst riverbanks and in old spring deposits in the region. These date to Earlier stone Age and may date between 1,5 million to 250 000 years ago. A good case study of ESA sites is the Sterkfontein World Heritage site shared between the North West and Gauteng Province south of affected area. The sites yielded evidence of earliest human evolution dating to between 1,5 million years and 250 000 years old. As such the sites are referred to as the cradle of humankind.

In line with cultural history chronology the large hand axes and cleavers were replaced by smaller stone tools of the Middle Stone Age (MSA) which consists of flake and blade industries. Evidence of Middle Stone Age occur throughout the Gauteng Province and date between 250 000 and 30 000 years ago. These stone artefacts like the Early Stone Age tools are also found mainly in gravels in the main riverbanks.

The Later Stone Age is characterised by campsites of San hunter-gatherers and Khoi pastoralists. Despite their estimated ubiquitous, LSA sites pose bigger challenge to identify in situ because they are spread on open lands most of which are concealed by vegetation and buried underground. The preservation of these sites is poor and often not possible to date them. At most, LSA sites are represented by a few stone tools and few fragments of bone (Deacon and Deacon 1999). However the most notable LSA sites that yielded most evidence are those that survived in rock shelters and caves associated with mountain ranges. Magaliesburg Mountains have yielded large collections of LSA sites. The caves and rock shelters exhibit occupational deposits left behind by generations of LSA San Hunter-gatherers. The deposits are well preserved consisting of living deposits and rock art paintings along the walls (Deacon and Deacon 1999).

About 2000 years ago, evidence of pastoralism started emerging in LSA sites associated with the Khoi pastoralists. The Khoi pastoralists predate the Bantu farmers by centuries. They introduced food production in Southern Africa. They are credited for introducing the first domesticated animals (sheep, goats and cattle and the use of ceramics vessels in Southern Africa (ibid). Often archaeological sites are found close banks of large streams and rivers.

About 1700 years ago, Early Farming Communities (EFC) began arriving in the southern African region bringing with them settled life and food production, (Huffman, 2007). These farmers were Bantu speakers who introduced unique settlements which came to be known as the Central Cattle Pattern associated with the Kalundu Iron Age Tradition. These communities are credited with the development of southern Africa's first complex society evolving from Schroda to K2 and Mapungubwe in the Shashe-Limpopo Basin from round about 700 AD to 1300AD (ibid).

By the 1400s AD Nguni Late Iron Age farmers from the east coastal lands migrated inland settling around the Vaal River basin. These were the ancestors to the Sotho-Tswana communities such as the Fokeng and Kwena who came to dominate the regions such as modern day Gauteng, North West and Free State provinces.

The Late Iron Age Sotho-Tswana communities indirectly engaged in the Indian Ocean Trade exporting ivory and importing consumables such as cloth and glass beads. The exporting point was Delagoa. This brought the Sotho-Tswana speaking community in touch with the Indo-Asian and first

Europeans (Portuguese). It was the arrival of the Dutch and the English traders that opened up Delagoa Bay to more trade with the international traders (Huffman 2007).

At the same time population was booming following the increased food production that came with the introduction of maize that became the staple food. Naturally, there were signs that population groups had to compete for resources especially along the east coastal regions. The central South African region where the Sotho-Tswana communities predominated saw the rise of large defensive settlements such as Molokwane, Kaditshwene and Dithakong. As the KwaZulu Natal coastal region imploded in the early 1800s, most referenced as the *mfecane* (wandering hordes) period of tremendous insecurity and military stress, this eventually affected the entire Southern Africa including the modern day Gauteng area. Around the 1830s, the region also witnessed the massive movements associated with the *mfecane* such as Mzilikazi and the Ndebele. The causes and consequences of the *mfecane* are well documented elsewhere (e.g. Hamilton 1995; Cobbing 1988). In this context new African kingdoms imaged such as the Zulu Kingdom under Shaka in the second quarter of the 1800s AD.

From 1835 the Voortrekker with horses and wagons began arriving in the flat lands foothills in the regions east of the Magaliesberg Range of Mountains spread into modern day Gauteng. They spread establishing settlements which came to be settler towns such as Pretoria, etc. across modern day Gauteng. The Voortrekkers arrived in Gauteng regions in the shadow of the weakened African kingdoms and chiefdoms in the aftermath of the *mfecane*. This effectively ushered in new era of colonial occupation by succeeding Afrikaans and British colonial administration authorities through the last half of the 1800s and into the last 1900s. The colonial wars of the 1899 to 1902 led to the establishment of the Union of South Africa in 1910 bring the country under full colonial administration. This lasted to 1994 when democratic rule was eventually established.

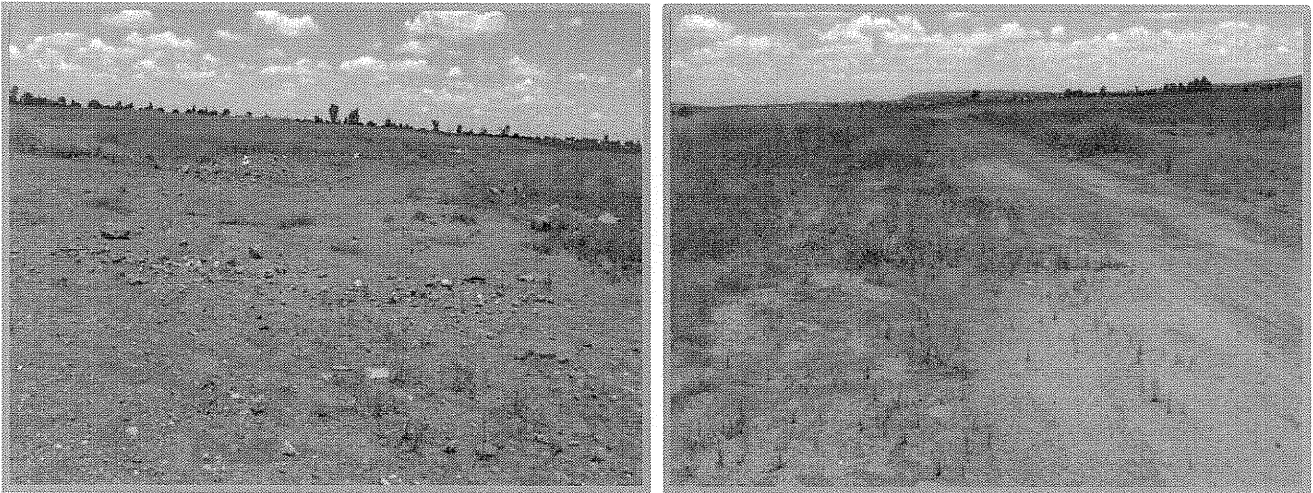
In the context of the modern day South Africa, the project area is situated in Soweto within the Johannesburg Metropolitan Municipality in the Gauteng Province. The project area is situated in the vicinity of Jababvu residential area in Soweto. The area is rich with history of modern struggles for liberation from the 1950s to 1994. It currently covered with high density and low-income residential properties and communities. The affected project area has previously been disturbed by earlier developments.

5.2. Contemporary History

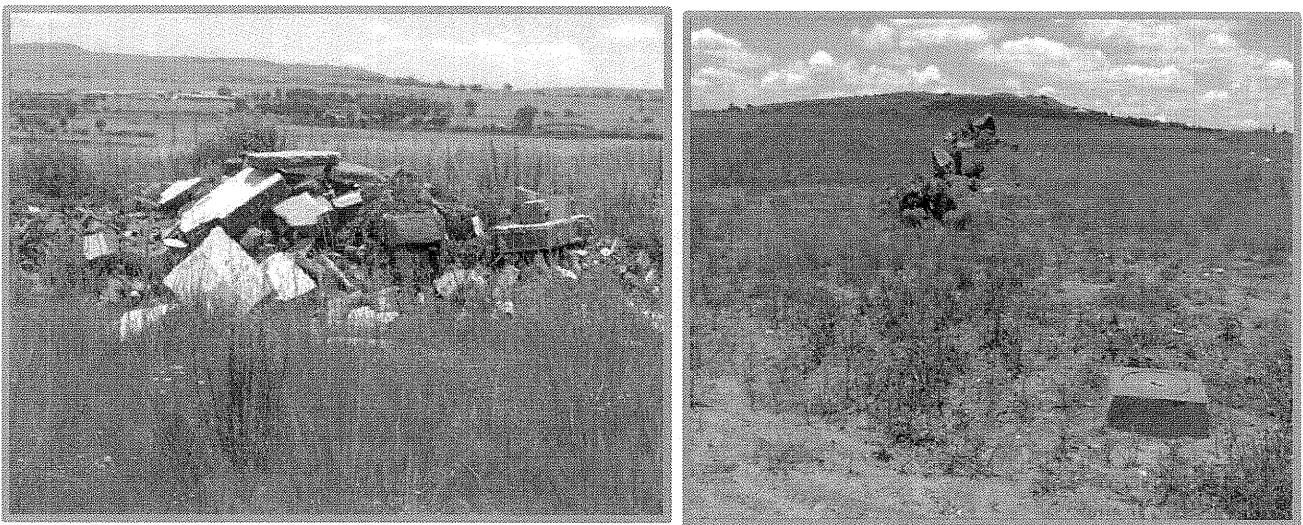
The proposed Kanana Park Extension 6 Township site will fall within the Johannesburg Metropolitan Municipality in Gauteng Province. The urban areas consist of the entire Gauteng Province. The study

area covers the area earmarked for the proposed housing development. The study area is highly transformed by both formal and informal human habitation typical of Gauteng Province. Numerous access roads, dirt tracks and foot paths cut across the project area. Accidental fires have also resulted in substantial degradation of grasslands. Subsistence farming is a common part of the landscape. (see plates 1 and 12).

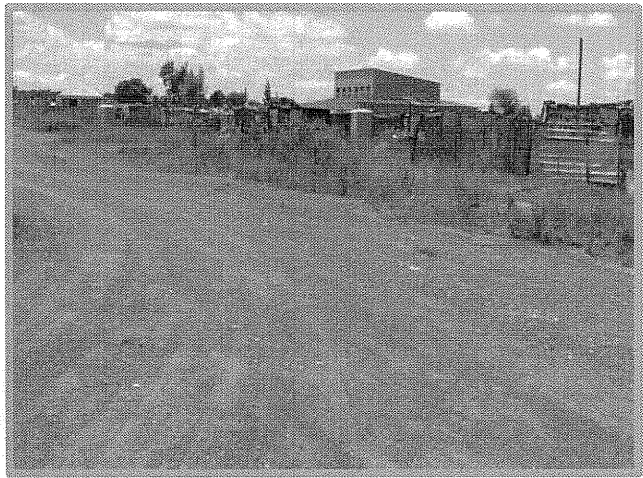
Plates 4 - 11: Pictorial view of selected sections of the project area (all Photographs (c) Author 2011).



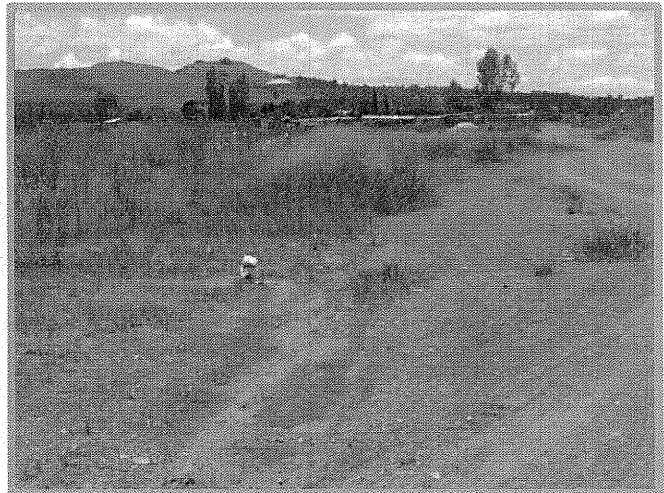
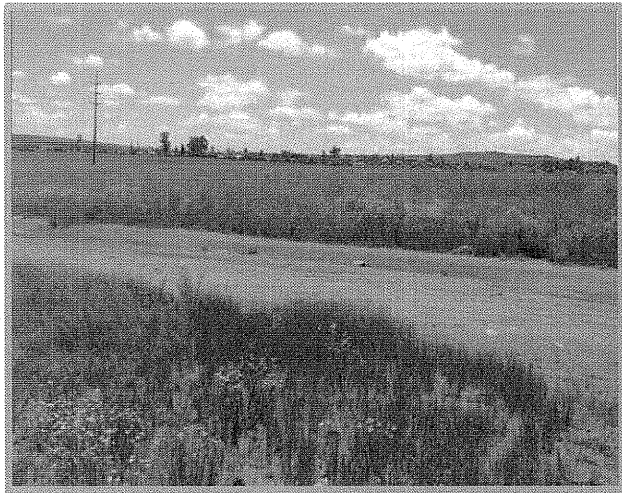
Plates 4 and 5: Pictorial of the Kanana Park Extension 6 Township site (Left) and mid section of the Kanana Park Extension 6 Township site (Right).



Plates 6 and 7: Pictorial views of construction rubble dumped in the site of interest. (Left) and section of the Kanana Park Extension 6 Township site through sloppy area (Right).



Plates 8 and 9: Shembe Open Air Church near the site of interest (Left) and a built up area on the edge of the site of interest (Right) (Photo by Author, 2011.).



Plates 10 and 11: Pictorial views of built up sections near the Kanana Park Extension 6 Township site (Left) and cleared area within the site of interest (Right).

6. RESULTS OF THE ARCHAEOLOGICAL/HERITAGE ASSESSMENT STUDY

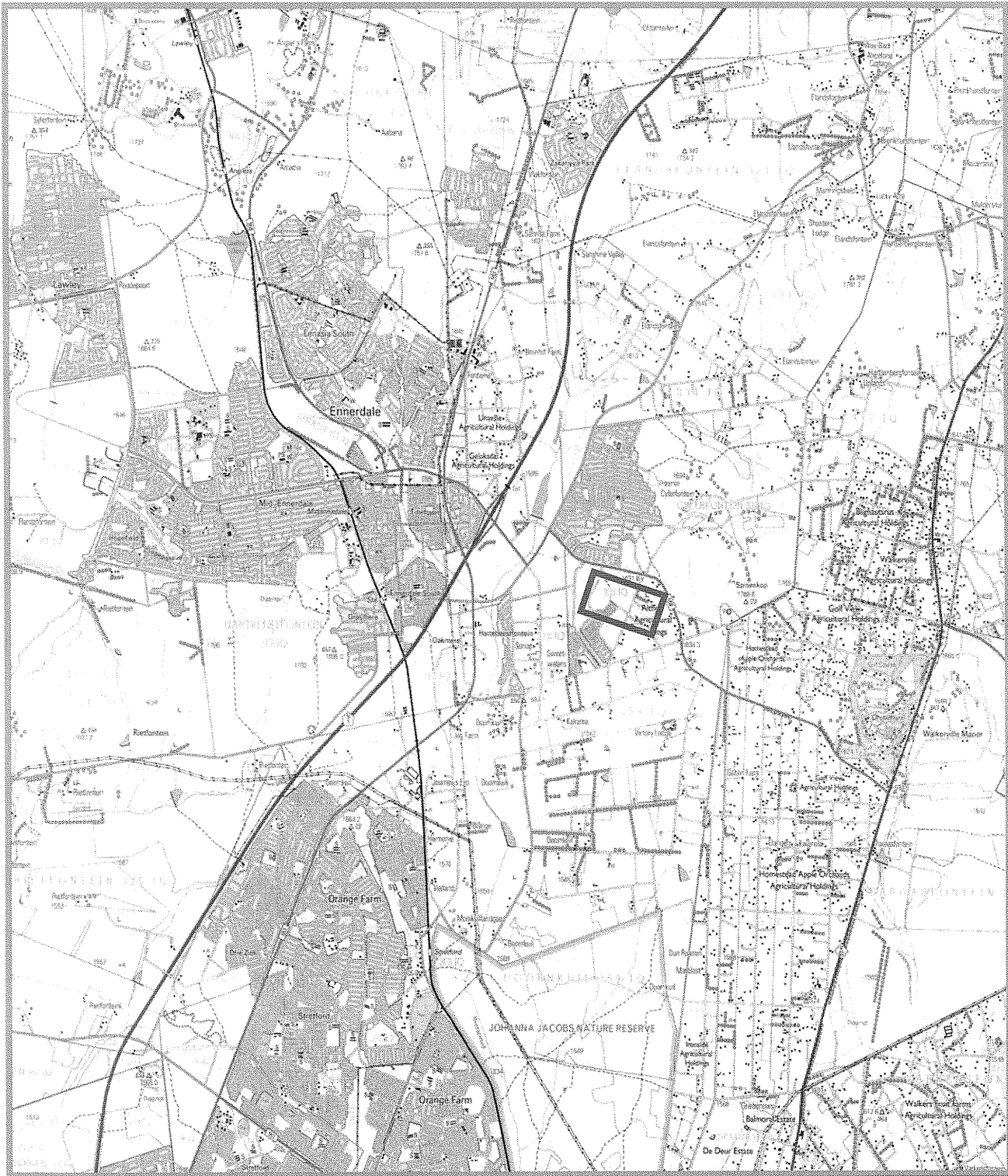
6.1. Location Details

Province: Gauteng

Municipalities: Johannesburg Metropolitan Municipality.

Proposed development: Township Establishment.

1:50 000 map name: 2627BD (Fig. 2).



6.2. Geographical co-ordinates

- **Proposed Kanana Park Extension 6 Township :** 26° 25' 17 .8" S; 27° 53' 52.7" E (Also see Figure 2 & 3) (Existing sewerage and water reticulation infrastructure within Kanana Park Extension 6 Township site (see Plate 1).
- **A cleared section of the proposed site:** 26° 25' 42 .7" S; 27° 53' 36.2" E (Also see Figure 2 & 3) (Existing sewerage and water reticulation infrastructure within Kanana Park Extension 6

Township site (see Plate 1).

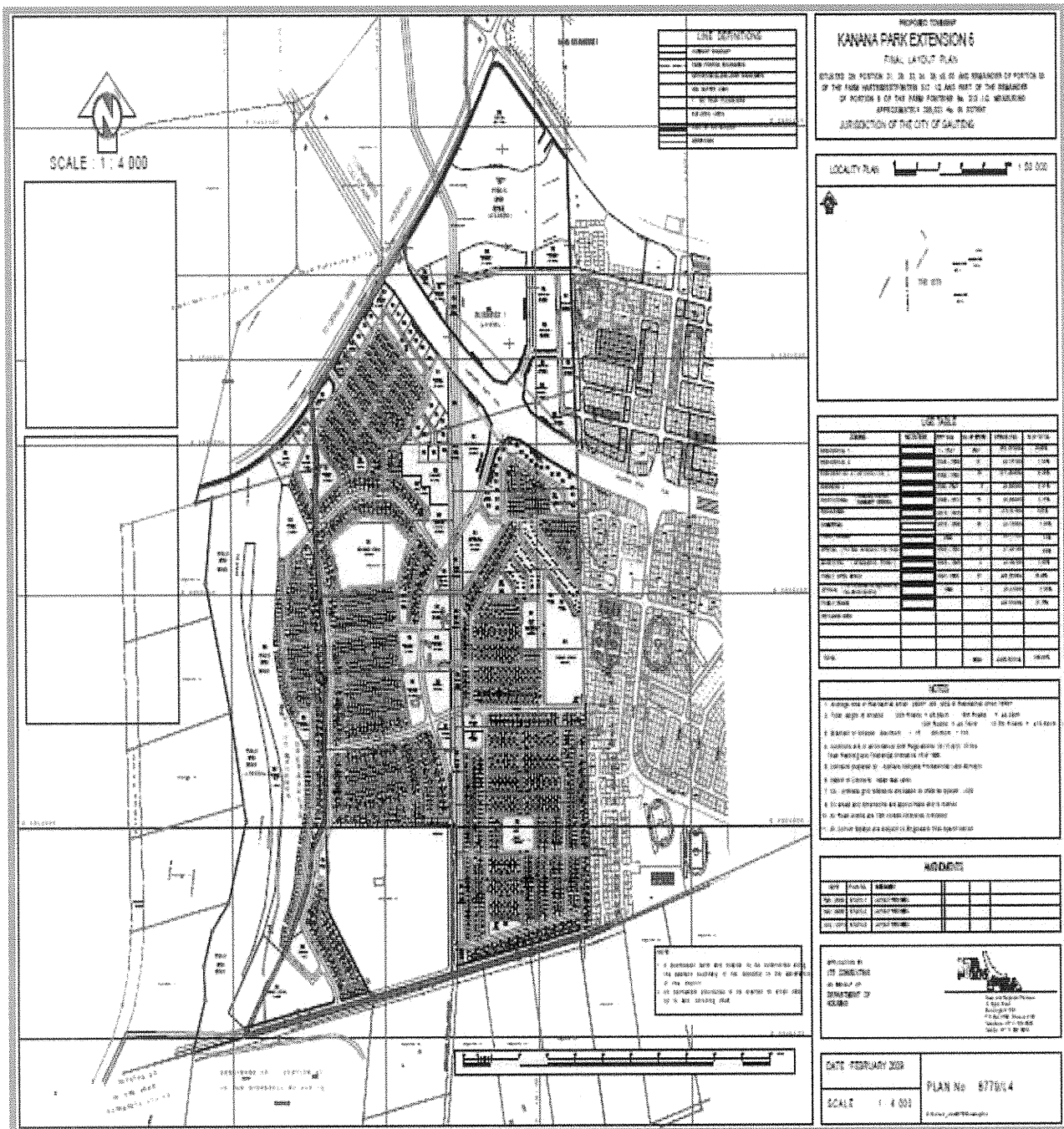
- **Informal settlement on the edge of the site of interest :** 26° 25' 43 .2" S; 27° 53' 39.6" E
- **Contemporary stone walled structure near eastern edge of the site :** 26° 25' 43 .2" S; 27° 53' 39.6" E
- **Abandoned farm house and water tank :** 26° 25' 42 .7" S; 27° 53' 36.2" E
- **Point on the centre of the proposed site :** 26° 25' 39 .1" S; 27° 54' 18.0" E
- **Construction rubble dumped within the proposed Kanana Park Extension 6 Township:** 26° 25' 40 .1" S; 27° 53' 24.5"E (Also see Figure 2 & 3) (Proposed T-off site for Kanana Park Extension 6 Township) (see Plate 1).
- **Shembe open air church near the site of interest:** 26° 25' 29 .8" S; 27° 53' 36.2"
- **North eastern edge of the site :** 26° 25' 22.3" S; 27° 54' 00. 8" E (position within the Kanana Park Extension 6 Township.).

6.3. description of the kanana park extension 6 township site

The proposed Kanana Park Extension 6 Township site is located at vacant land in the vicinity of N1 South near Garsmere Toll Gate.

- The 250ha proposed site has been established through consideration of biophysical, social, technical and cultural aspects. The BA process will aim to provide a final site selection of the proposed residential site based on biophysical, social, cultural and technical considerations.

Figure 3: Aerial view of preferred Kanana Park Extension 6 Township site (yellow) and alternative site (brown)1 – 4. This view shows the nature of disturbances in the project area (Source: Kala-Hari Survey Solutions BID, 2011).



6.4. Archaeological and Heritage Site.

The Kanana Park Extension 6 Township site did not yield any confirmable archaeological sites or material. The site is heavily degraded from previous agricultural land use. The affected landscaped is heavily degraded from previous and current agricultural land use or from residential property developments, for any significant *in situ* sites to be preserved on location. The proposed Kanana Park Extension 6 Township site covers approximately 250 ha. At least three isolated scatters of potsherds

were recorded along the site. All such scatters were recoded in erosion gullies and were not linked to any discernable archaeological sites. The identified potsherds were not classifiable because none were decorated. As such, it was not possible to estimate whether the potsherds originated from archaeological or contemporary sites. However, it was clear that none of the identified scatters could be recorded as identifiable sites and the potsherds originated from other sites probably outside the Kanana Park Extension 6 Township corridor

Most of the proposed Kanana Park Extension 6 Township corridor will traverse through heavily disturbed landscape. There exist residential, subsistence agricultural fields, timber and sugar cane plantations, grazing land and rail and Kanana Park Townships, roads and other associated infrastructures across the entire project area. As such the proposed establishment of Kanana Park Extension 6 Township will be additional to *in situ* developments already on project area (Figure 2 - 4; also see Plates 1 to 10). As such the chances of recovering significant archaeological materials *in situ*, particularly open settlement sites, were seriously compromised and limited. If such sites existed on this particular project area, they may have been destroyed during the long history of land use and other destructive land use patterns such as deep ploughing, road works, residential and associated infrastructure constructions that already exist on the project area.

Based on the field study results and field observations, it is the considered opinion of the authors that the affected landscape has low to medium potential to yield previously unidentified archaeological sites during subsurface excavations and construction work associated with the proposed establishment of Kanana Park Extension 6 Township development.

6.5. Historical and Recent sites

Generically speaking, historic sites are associated with white settlers, colonial wars, industrialization; recent and contemporary African population settlements, contemporary ritual sites dating to the last hundred years. However, recent historic period sites and features associated with the, African communities, settler and commercial farming communities are on record in the general project area environs. Although the affected general landscape is associated with historical events such as white settler migration, colonial wars and the recent African peopling of the region, no listed specific historical sites are on the proposed development sites. The more common functions of places of cultural historical significance may include:

- Domestic
- Recreation & culture
- Commerce & trade
- Agriculture & subsistence
- Social & Health care
- Religion
- Designed landscape
- Funeral (cemeteries, graves and burial grounds)
- Civil and Structural Engineering
- Education
- Defence /Military

Abandoned historic remains of a homestead were recorded on portion of the sample site section. The site was not surveyed in any details because of dense vegetation cover (see Plate 5).

Furthermore, most of the thick vegetation cover of the cultural landscape affected by the Kanana Park Extension 6 Township development proposal retain high tangible and intangible ethnobotanical relevance. Local traditional healers and medicine people depend on these vegetation resources to herbs and traditional medicines.

6.6. Burial grounds and graves

The field survey did not yield any burial site at the proposed Kanana Park Extension 6 site. Whether they are known or not on record, from a heritage perspective, burial grounds and gravesites are accorded the highest social significance threshold (see Appendix 3). They have both historical and social significance and are considered sacred. Wherever they exist they may not be tempered with or interfered with during any proposed development.

The possibility of encountering human remains during subsurface earth moving works anywhere on the landscape is ever present. It is common that accidental burial finds are made on construction sites from time to time across the country particularly on historical cultural landscapes similar to the development project area. Although the possibility of encountering previously unidentified burial sites is low on the Kanana Park Extension 6 Township project site, should such sites be identified during subsurface construction work, they are still protected by applicable legislations and they should be protected (also see Appendixes for more details).

Significance valuation for Burial Ground, Historic Cemeteries and Individual Graves

The significance of burial grounds and gravesites is closely tied to their age and historical, cultural and social context. Nonetheless, every burial should be considered as of high socio-cultural significance protected by practices, a series of legislations, and ordinances.

6.7. Historical Monuments

There is no listed monuments on record on the direct path of the Site of Interest for the proposed Kanana Park Extension 6 Township development.

7. DISCUSSION

Although some light potsherd scatters were recorded on one location within the proposed Kanana Park Extension 6 Township site, these could not be confirmed as distinct *in situ* archaeological sites.

Site survey did not locate the original source of the potsherds since the scatter were identified in eroded section suggesting that they were washed down from another sources. However, the potsherds are signatures for potential archaeological sites that may be associated with the proposed Kanana Park Extension 6 Township site. No archaeological sites were recorded on the proposed Kanana Park Extension 6 Township sites. The lack of clearly distinguishable archaeological sites recorded during the current survey is thought to be a result of two primary interrelated factors:

1. That the Kanana Park Extension 6 Township site is situated within a heavily degraded area, and have reduced sensitivity for the presence of high significance physical cultural site remains, be they archaeological, historical or burial sites, due to previous earth moving disturbances resulting from developments and other land uses in the project area.
2. That the survey focused on sample sections that had high potential to yield possible archaeological sites. Due to the size of the Kanana Park Extension 6 Township site, it was impractical to cover every inch of the project area. As such, there is the possibility that low to medium archaeological sites exist in the project area whereas the sampled sections fell outside sections with potential distinct archaeological sites.
3. Limited ground surface visibility on sections of the Kanana Park Extension 6 Township project area that were not cleared at the time of the study may have impeded the detection of other physical cultural heritage site remains or archaeological signatures immediately associated with the Kanana Park Extension 6 Township site of interest. This factor is exacerbated by the fact that the study was limited to general survey without necessarily conducting any detailed inspection of specific locations that will be affected by the Kanana Park Extension 6 Township establishment.

The absence of confirmable and significant archaeological cultural heritage site is not evidence in itself that such sites did not exist in the project area. It may be that, given the dense development in most sections of the Kanana Park Extension 6 Township site, if such sites existed before, changing earth-moving activities may have destroyed their surficial evidence. Furthermore, some sections were not accessible due to thick vegetation cover. Significance of the Sites of Interest (proposed Kanana Park Extension 6 Township site) is not limited to presence or absence of physical archaeological sites. Abandoned contemporary homestead remains were recorded in the vicinity of Kanana Park Extension 6 Township site. This confirms the fact that the project area has several generations of human settlements. These discoveries testify to the significance of the project area as a cultural landscape of note, which has discernable links to local oral history and folk stories, environmental and ethnobotanical aesthetics, popular memories etc. associated with significance emanating from intangible heritage of the region.

7.1. Cultural Heritage Site Assessment of Significance

The appropriate management of cultural heritage resources is usually determined on the basis of their assessed significance as well as the likely impacts of any proposed developments. Cultural significance is defined in the Burra Charter as meaning *aesthetic, historic, scientific or social value for past, present or future generations* (Article 1.2). Social, religious, cultural and public significance are currently identified as baseline elements of this assessment, and it is through the combination of these elements that the overall cultural heritage values of the site of interest, associated place or area are resolved.

Not all sites are equally significant and not all are worthy of equal consideration and management. The significance of a place is not fixed for all time, and what is considered of significance at the time of assessment may change as similar items are located, more research is undertaken and community values change. This does not lessen the value of the heritage approach, but enriches both the process and the long-term outcomes for future generations as the nature of what is conserved and why, also changes over time (Pearson and Sullivan 1995:7). This assessment of the Indigenous cultural heritage significance of the Site of Interest as its environments of the study area is based on the views expressed by the Claimant and his community representatives consulted, documentary review and physical integrity.

African indigenous cultural heritage significance is not limited to items, places or landscapes associated with pre-European contact. Indigenous cultural heritage significance is understood to encompass more than ancient archaeological sites and deposits, broad landscapes and environments. It also refers to sacred places and story sites, as well as historic sites, including mission sites, memorials, and contact sites. This can also refer to modern sites with particular resonance to the indigenous community. The site of interest considered in this project falls within this realm of broad significance.

7.2. Assessment Criteria

The Guidelines to the SAHRA Guidelines and the Burra Charter define the following criterion for the assessment of cultural significance:

Aesthetic Value

Aesthetic value includes aspects of sensory perception for which criteria can and should be stated. Such criteria may include consideration of the form, scale, colour, texture and material of the fabric; sense of place, the smells and sounds associated with the place and its use.

Historic Value

Historic value encompasses the history of aesthetics, science and society, and therefore to a large extent underlies all of the terms set out in this section. A place may have historic value because it has influenced, or has been influenced by, an historic figure, event, phase or activity. It may also have historic value as the site of an important event. For any given place the significance will be greater where evidence of the association or event survives in situ, or where the settings are substantially intact, than where it has been changed or evidence does not survive. However, some events or associations may be so important that the place retains significance regardless of subsequent treatment.

Scientific value

The scientific or research value of a place will depend upon the importance of the data involved, on its rarity, quality or representativeness, and on the degree to which the place may contribute further substantial information. Scientific value is also enshrined in natural resources that have significant social value. For example, pockets of forests and bushvelds have high ethnobotany value.

Social Value

Social value embraces the qualities for which a place has become a focus of spiritual, religious, political, local, national or other cultural sentiment to a majority or minority group. Social value also extend to natural resources such as bushes, trees and herbs that are collected and harvested from nature for herbal and medicinal purposes.

7.3. Statement of Significance

Aesthetic Value

The aesthetic values of the Site of Interest (Kanana Park Extension 6 Township site) and the overall project area are contained in the Valley Bushveld environment and landscape typical of this part of the Gauteng Province. The visual and physical relationship between Sites of Interest and the surrounding historical Cultural Landscape demonstrates the connection of place to the local and oral historical stories of the African communities who populated this region going back into prehistory. The proposed Kanana Park Extension 6 Township development will be situated within an environment and associated cultural landscape, which, although developed by existing settlements, and plantations remains representative of the original historical environment and cultural landscape of Gauteng area. The local communities consider the project area a cultural landscape linked to their ancestors and history. However, the proposed developments will not alter this aesthetic value in any radical way since it will add value to the constantly changing and developing settlements.

Historic Value

The Indigenous historic values of the Sites of Interest and overall study area are contained in the claim of possible historic homesteads being located on the affected area. The history of generations of the Sotho-Tswana clans is tied to this geographical region. Such history goes back to the pre-colonial period, through the rise and fall of King Shaka's Zulu Kingdom, through the colonial wars and subsequent colonial rule up to modern day Gauteng.

Scientific value

Past settlements and associated roads, Kanana Park Extension 6 Townships and other auxiliary infrastructure developments and disturbance within the Sites of Interest associated with the proposed Kanana Park Extension 6 Township site has resulted in limited intact landscape with the potential to retain intact large scale open archaeological site deposits. Disturbed potential archaeological deposits represented by identified potsherd scatters are present within the project area, but the overall integrity of such archaeological deposits present is considered to be low, and any archaeological material associated with the potsherd scatter sites have low scientific value. However, should intact archaeological sites be recorded within the Kanana Park Extension 6 Township site and immediate surrounding areas, they may retain scientific evidence that may add value to the local and regional history.

There are sections of the Kanana Park Extension 6 Township site that are covered in thick grass. Such areas are highly significant to the local communities for their provision of herbs and traditional medicines. As such, these area retain ethnobotany scientific significance

Social Value

The project sites fall within a larger and an extensive **Gauteng** cultural landscape that is integrated with the wider inland northeast Gauteng region. The overall area has social value for the local community, as is the case with any populated landscape. Literature review suggests that social value of the overall project area is also demonstrated through local history which associates the area with the African struggle against settler colonialism at the end of the 1800s, the rise of Shaka's Zulu Kingdom, the subsequent *mfecane*, the colonial wars of resistance the century long struggle for democracy that followed colonial subjugation.

Several generations of communities originate from the project area and continue to call it home. As such, they have ancestral ties to the area. The land also provides the canvas upon which daily socio-cultural activities are painted. The remains of historic homesteads recorded in the project area testify to the fact of generational homes and settlements. All these factors put together confirms the social

significance of the project area. However, this social significance is unlikely to be negatively impacted by the proposed Kanana Park Extension 6 Township development especially given the fact that the development will add value to the human settlements and activities already taking place.

Sections of the Kanana Park Extension 6 Township site covered in thick bushes and vegetation retain social value as sources of important herbs and traditional medicines. As such, they must be considered as significant social value sites.

8. CONCLUSIONS & RECOMMENDATIONS

The study did not find any permanent barrier to the proposed Kanana Park Extension 6 Township development. As such, it is recommended to the SAHRA that the development be cleared to proceed subject to specified recommendations made in the following sections. The following recommendations are based on the results of the A/HIA research, cultural heritage background review, site inspection and assessment of significance.

8.1. Management & Policy Recommendations

Community Advisory

Should community consultations being held through the project EIA PPP refer to any cultural issues associated with the project area, such matters should be addressed adequately. The proposed Kanana Park Extension 6 Township sites are associated with existing rural communities and a heritage or cultural aspirations they may be affected by the development should be acknowledged. To date, the PPP consultation process has not identified cultural heritage contestation to the project.

Recommendation 1

The Project Public Participation Process should ensure that any cultural heritage related matter for this project is given due attention whenever it arises and is communicated PHRA-G throughout the proposed project development. This form of extended community involvement would pre-empt any potential disruptions that may arise from previously unknown cultural heritage matter that may have escaped the attention of this study.

8.2. Indigenous African Cultural Places

The identified abandoned contemporary house requires careful planning during the proposed development should the final site traverse through such sites. Furthermore, there are portions of the Kanana Park Extension 6 Township site that are covered by dense vegetation. Such areas retain high

social significance associated with ethno-botany, which makes such area potential sources of traditional herbs and medicines.

Recommendation 2

- *The Shembe open air temple may not be disturbed wherever they are situated within or near the Kanana Park Extension 6 Township site. The location of individual Kanana Park Extension 6 Township infrastructure should ensure that such sites are not disturbed. The same applies to open public village meeting sites that may be associated with the Kanana Park Extension 6 Township site.*
- *Location of Kanana Park Extension 6 Township infrastructure should be restricted to minimum footprint impact especially where such infrastructure fall within bushy area. Such bushy sections have local ethno-botany significance as sources of traditional herbs and medicines. As such disruption and vegetation clearance should be minimal.*
- *Preserved bushveld areas should be protected for ethnobotany significance. As such this development should avoid excessive vegetation clearance during the development.*

8.3. Archaeological Graves and Burial & Cultural Heritage Sites

No intact surface archaeological heritage deposits were recorded within the study area. Insignificant light potsherd scatters were recorded in eroded sections of the Kanana Park Extension 6 Township site. These scatters testify to possibility of identifying *in situ* archeological sites. Furthermore, the general project area's extensive history of indigenous activity is such that it is possible that remnant or isolated archaeological and historical artefacts or heritage sites may be present in areas that have minor disturbance and development along the proposed Kanana Park Extension 6 Township site servitude. The abandoned homestead remains recorded during the survey also points to the potential to yield more such sites, some of which may have medium to high significance. Therefore no direct conflicts between archaeological and physical cultural heritage properties including burial grounds and the proposed development are anticipated when construction begins.

Recommendation 3

An Archaeologist should be retained to conduct an Archaeological Walk-down survey of the Kanana Park Extension 6 Township site covering the finalised actual Kanana Park Extension 6 Township site to ensure that no infrastructure will be positioned on any archaeological sites or material. Kanana Park Extension 6 Township sites have limited potential to affect any form of physical cultural properties and any known archaeological resources.

Recommendation 4

The proposed Kanana Park Extension 6 Township development should be approved to proceed as planned under strict observation that construction work does not extend beyond the surveyed Kanana Park Extension 6 Township site. The foot print impact of the proposed Kanana Park Extension 6 Township development and associated infrastructure should be kept to minimal to limit the possibility of encountering chance finds within servitude.

Recommendation 5

- In situations where unpredicted impacts occur (such as accidentally disturbing a previously unknown grave), construction activities should be stopped and the heritage authority notified immediately. In the unlikely event of chance archaeological material or previously unknown human remains being disturbed during subsurface construction, the finds should be left in situ subject to further instruction from the project archaeologist or heritage authorities (refer to Appendixes 1 - 4 for additional details). The overriding objective, where remedial action is warranted, is to minimize disruption in construction scheduling while recovering archaeological and any affected cultural heritage data as stipulated by the PHRA-G and NHRA regulations.*
- A professional archaeologist should be retained to monitor all significant earth moving activities that may be implemented as part of the proposed Kanana Park Extension 6 Township development. The monitoring process would ensure that should any archaeological or human remains be disturbed during subsurface construction work at the Sites of Interest, immediate remedial rescue and salvage work would be actioned without delay.*

The recommended heritage monitoring operations will not stop works but will form part of the proposed project's construction EMP in line with best-practice heritage procedures.

8.4. Interpretation & Active Management Recommendations

The African communities have a long and significant connection with project area. Like any other generational society, there are several other cultural activities that take place within the affected settlement areas associated with the proposed Kanana Park Extension 6 Township development.

Recommendation 7

Although the possibility of conflict between the community and the proposed development related to culture heritage is unlikely, PHRA-G should acknowledge on behalf of the community, that the project area is situated in a culturally significant landscape associated with African local history and cultural activities. PHRA-G may also acknowledge that such significance is not tied to physical sites or archaeological sites only, but to intangible

heritage such as popular memories, oral history, ancestral remembrance, religious rituals, aesthetic appreciations, living experiences and folklores. As such, the community retains the right to have their constitutionally guaranteed cultural heritage rights respected and protected without being limited to existence of physical evidence such as archaeological sites. Should such issues arise in association with this proposed development, adequate attention should be devoted by the proponent, PHRA-G and community to address them?

Recommendation 8

Subject to the recommendations herein made, there are no significant cultural heritage resources barriers to the proposed Kanana Park Extension 6 Township development in the Gauteng Province. The PHRA-G may approve the proposed development to proceed as planned with special commendations to implement the recommendations here in made.

9. CONCLUDING REMARKS

The literature review and field research confirmed that the project area is situated within a contemporary cultural landscape dotted with settlements with long history. Field survey was conducted during which it was established that the affected project area is degraded by existing developments. Although the area is degraded, there is a possibility that the Site of Interest is part of a wider archaeological and historical site within and significant cultural landscape. Sites with light scatters of potsherds were recorded pointing to the potential of the area to yield archaeological sites. Historical and contemporary cultural sites were recorded. However, all recorded sites either have low significance or are not under direct threat from the proposed development. Nonetheless, the resources triggered the necessity to conduct a detailed Archaeological Walk-down survey once the exact location of the proposed Kanana Park Extension 6 Township infrastructure is approved. The survey will cover the specific infrastructure positions.

This report conclude that the proposed Kanana Park Extension 6 Township development may be approved by Gauteng to proceed as planned subject to recommendations herein made which include a conditional walk-down survey of the Kanana Park Extension 6 Township site heritage monitoring plan being incorporated into the construction EMP (also see Appendices).

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